

"b. —brevirostrum striatum & cancellatum, labro interno repando et splendente, mucrone costato, atro purpureum.

(5) "There is good prospect for the affairs of *Mr Slauter*, being very happy for him, that I hath the occasion to gain the favour of the Deputys of the Synode for him.

Now Dear Sir wishing you and your family all health and prosperity I remain

Your most obliged Servant

Joh. Frd. Gronovius

Leyden June 26. 1751.

"[as all the Goods etc. was ship'd on board I don't know whether I can send the Roots etc. by this ship.]"

REVIEWS.

Kraemer's Scientific and Applied Pharmacognosy *

"Scientific and Applied Pharmacognosy" is the title of a recent book by Professor Henry Kraemer, of the Philadelphia College of Pharmacy. This volume might well have been given the title "Systematic Plant Morphology," for between its covers we find arranged according to "Die Natürlichen Pflanzenfamilien" of Engler and Prantl all of the more important groups of plant families with a summary of the principal outer and inner morphological characteristics of each. Morphological and anatomical descriptions of some four hundred specific food or drug products are given under the proper plant families. These products represent practically all of the plant families, and hence the work at once becomes a valuable one on the comparative anatomy of plants. This should make the book helpful to systematists as well as morphologists. Furthermore it will prove very helpful to botanists who are looking for material to aid them in their teaching.

* Kraemer, H. Scientific and applied Pharmacognosy, pp. 1-850. [Illust.]. No. 145 No. 10th Street, Philadelphia, Pa. Price \$5.00.

The book is intended for the use of pharmacists, pharmacologists and food and drug analysts and is much more comprehensive than the usual volume on plant morphology. Physiological and ecological problems are usually involved in the study of vegetable drugs, and this work contains a large amount of material which should be of interest to physiologists and ecologists.

The facts regarding the detection and isolation of cell contents in small quantities of material, in some cases being merely a few sections will be very helpful to research workers, especially cytologists; for example: The detection of iodine in the kelps as given on page 25. The micro-sublimate crystals of agaricinic acid in *Polyporus* as illustrated on page 37. The illustrations of crystals of lichenostearic acid obtained by micro-sublimation of pieces of the thallus of *Cetraria* on page 48. Crystals from exudations and extracts as of catechu, gambir, aloes, benzoic acid, page 126, etc. Again the accurate study of the principal crystallizable constituents by means of the petrographical microscope as of vanillin, page 173, coumarin, page 175, morphin, etc., page 325-330, etc. The work of the great masters in pharmacognosy and botany have been utilized and frequent references to original articles are given throughout the text. There are many new things in the book which are generally not available, regarding the true source, formation of spruce gum, the origin of Oregon balsam and descriptions of very many little used drugs as *Manaca*, *Coto*, etc.

This new volume should prove to be an encouragement to the directors of botanical departments in universities and in technical schools in their efforts to extend and introduce courses in histological applied botany. "Applied and Economic Botany," an earlier volume by Professor Kraemer, contains the fundamental considerations of outer morphology, inner morphology, etc., such as should precede the work covered by the present volume.

In view of the fact that some teachers may feel that the data concerning applied plant physiology and ecology as contained in this book is inadequate, it should be pointed out that very little is known concerning the proper application of these principles, with the end in view of securing a more uniform quality of vege-

table drugs. Here, then, is a great field for research; and no doubt future editions of this book by Professor Kraemer will contain much which some may expect to find in the present volume.

Especial attention should be called to the chapters dealing with the problems of pharmacognosy, animal drugs, and to the key and systematic classification of powdered drugs. The volume is illustrated with about 1,000 separate figures, the majority of which are original with the author, and supplement the text.

E. L. NEWCOMB.

PROCEEDINGS OF THE CLUB

JANUARY 26, 1916

The meeting of January 26, 1916, was held in the morphological laboratory of the New York Botanical Garden at 3:30 P.M. Vice-president Barnhart presided. Twenty-nine persons were present.

The minutes of the annual meeting held January 11 were read and approved.

Dr. Levine, chairman of the committee on the amendment of the constitution proposed at the last meeting, reported that the committee was unable to report at this meeting. The subject, however, was discussed informally.

President Harper then took the chair.

The application of Dr. E. W. Olive for a grant of two hundred dollars (\$200.00) from the Esther Herrman Fund to enable him to collect aquatic fungi, insect-attacking fungi, short-cycled and other rusts, as well as lower fungi of Porto Rico, was indorsed.

The resignation of Dr. E. B. Southwick was read. No action was taken at this meeting.

The first number on the announced program was a paper by Dr. N. L. Britton on "Recorded Flora of the Isle of Pines." The speaker gave a brief description of the topography of this island and reviewed the work of various collectors. Attention was called to an apparent similarity between certain species found on the Isle of Pines and on the South American coast.